IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Patent Examiner: Not yet assigned
Joseph McCrossan, et al.	Group Art Unit: Not yet assigned
Serial No.: 10/554,627	
Filed: October 26, 2005	
For: RECORDING MEDIUM, REPRODUCTION APPARATUS, RECORDING METHOD, REPRODUCING METHOD, PROGRAM, AND INTEGRATED CIRCUIT FOR RECORDING A VIDEO STREAM AND GRAPHICS WITH WINDOW INFORMATION OVER GRAPHICS DISPLAY	July 10, 2006 Costa Mesa, California 92626

PETITION TO MAKE SPECIAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sirs:

In accordance with MPEP Section 708.02(viii), applicant hereby requests that the above-identified application be made special, and a fee required in accordance with 37 CFR §1.17(i) is submitted herewith.

It is believed that the attached Preliminary Amendment presents all the claims directed to a single invention. If, however, it is determined that the claims are not directed to a single invention, applicant hereby agrees to elect without traverse as a prerequisite to the granting of special status to a single invention.

The present application is derived from a Japanese Patent Cooperation Treaty Application and an international search has been made in the Japanese Patent Office in JP International Application PCT/JP2004/006074. A copy of the PCT International Search Report is of record, along with the references cited in the International Search Report. Attached hereto is a copy of the International Search Report which had indicated that Claims 2 and 8 were novel.

(1) Disclosure of Prior Art

The International Search Report issued by the ISA cited the following:

Digital Video Broadcasting (DVB) Subtitling systems;
Final draft ETSI EN 300 743", ETSI Standards, European Telecomunications Standards Institute, Sophia-Antipo, FR;
EP 1 145 218 A (Broadcom Corp);
US 6 275 852 B1 (Abrahams Lawrence et al);
EP 0 920 014A (Sony Corp);
US 2001/026561 A1 (Morris Octavius J et al); and
US 6 473 102 B1 (Fulletron Guyerik B et al)..

In addition, the Japanese Patent Examiner further cited the following Japanese Laid-Open Patent Application No. 2002/209177 (U.S. Patent No. 5,907,659); Japanese Laid-Open Patent Application No. 2003/219372 (U.S. Patent Publication No. 2003/142236). These references are already of record in a Supplemental Information Disclosure Statement of March 24, 2006, a copy of which is attached hereto.

(2) Comments on the cited references and pursuant to 37 CFR §1.111.

Attached are the original claims filed with the Application and as can be readily determined, features associated with a video and a graphic stream for combining the graphics within a window defined for receiving the graphics data pursuant to window information associated with the width, height and position of the window has been carried forward in the claims set forth in the Preliminary Amendment consistent with the further prosecution in the

Japanese Patent Office. Thus, the claims currently presented in the Preliminary Amendment represent the same or similar scope as the claims in the corresponding foreign application and in this case, are in fact the claims that were allowed in the foreign prosecution.

(3) Comments On The Relevance Of The Cited Reference.

Referring to the following Claim 17 set forth in the Preliminary Amendment:

17. (New) A recording medium used for storing data, the data comprising a digital stream constituted by multiplexing a video stream and a graphics stream, wherein

the video stream represents a moving picture made of a plurality of pictures,

the graphics stream includes a plurality of Display Sets each being a group of data that constitutes graphics for one screen,

a leading Display Set among the plurality of Display Sets is of an Epoch Start type,

the leading Display Set of the Epoch Start type includes graphics data and window information that specifies a window for rendering the graphics therein,

the graphics data represents graphics to be combined with the pictures,

the window information indicates a width, a height and a position of the window on a plane memory of a reproduction apparatus that combines graphics with the pictures, and

a Display Set following the leading Display Set is used for rendering graphics within the window.

The present invention is defined wherein a part of the plane memory is specified as a window for rendering graphics therein, and the graphics of the display set following the leading display set is rendered within the window.

Accordingly, the reproduction apparatus is not required to display all the graphics in the plane memory, and is just required to display graphics within the window having a limited size. The reproduction apparatus renders only graphics existing within the window, and omits rendering graphics included in the other part of the plane memory. This significantly lightens the processing load on software installed in the reproduction apparatus.

Further, it becomes possible for a producer who performs authoring to guarantee the synchronization in any kind of reproduction apparatus by setting the size of the window so as to ensure synchronization between the graphics and the picture, even when the graphics is updated under unfavorable conditions.

Moreover, it is possible to adjust the position and the size of the window using the window information. Thus, it is possible to position subtitles so as not to overlap the picture. Therefore, the viewability of the graphics is maintained even when the picture on the screen changes as time passes, and thus it is possible to maintain the quality of the film.

As can be seen, the present invention provides important editing capacity to assist in the production of, for example, a film having graphics of any desired configuration including subtitles associated with motion pictures that are to be presented in a second language.

The Search Report basically relied upon the "Digital Video Broadcasting (DVB) Subtitling Systems" setting forth the European Telecommunication Standards Institute Final Draft ETSI EN 300 743.

The cited reference "Digital Video Broadcasting (DVB) Subtitling systems; Final draft ETSI EN 300 743" describes graphics rendering of a DVB, and discloses a technique relating to what is called "Region." In the subtitle decoder model (p.13 FIG. 3), the Region is defined on a buffer (Pixel Buffer) which stores graphics obtained through decoding of subtitles (Subtitle

Processing). Among Regions defined on the Pixel Buffer, Regions to be displayed are described in the PCS (Page Composition Segment) to realize the graphics display.

For example, if a Region 1 including a caption (subtitles) saying "Shall we?" and a Region 2 including a caption saying "Said the fly on the mirror" are defined on the Pixel Buffer and the identifier of the Region 1 is described in the PCS, the caption "Shall we?" will be displayed based on the identifier. If the identifier of the Region 2 is described in the PCS, the caption "Said the fly on the mirror" will be displayed based on the identifier.

As can be seen, the cited reference does not disclose window information defining the window on the plane memory, and still less technical information on disclosing that window information is defined in a Display Set of the Epoch Start type among a plurality of Display Sets included in a graphics stream, and graphics of a Display Set following the Display Set of the Epoch Start type are rendered within the window. Therefore, the cited reference can not be a basis for rejecting the novelty of the present invention.

Also, the cited reference does not disclose a technique to store information that limits an area for rendering graphics in a recording medium to synchronize a moving picture and graphics. In other words, the cited reference fails to disclose a technique to store the window information according to the present invention in the recording medium.

As described above, the recording medium according to the amended Claim 1 possesses novelty and an inventive step over the cited reference.

The following describe the difference between the other references and the present invention.

The reference "EP 1 145 218 A (BROADCOM CORP)" discloses a graphics chip that synchronously realizes an analogue video input, a digital video input, a graphics input and an

audio input. This graphics chip has a unified structure which improves the bandwidth and the chip size. Due to the improvement of the bandwidth, the graphics chips can perform a scaling (scaling up or scaling down) with a processing efficiency as high as that of an anti-flutter filtering.

The reference "US 6,275,852 B1 (ABRAHAMS LAWRENCE ET AL)" discloses a technique to allow many users to access applications constituted of texts, graphics, and so on. Each application is divided into a plurality of Sections. Each Section forms a part of a page, and is constituted of Objects. The Object controls each application (e.g. nesting and scrolling) in a partition of an interface, and includes data to be displayed and program codes used for executing application through an interface of a user system.

The reference "EP 0 920 014A (SONY CORP)" suggests displaying a viewer window, a logo window and a program window during a program editing. The viewer window is used for generating an event by determining an editing point on a video material provided to an editing apparatus. The logo window is used for displaying a video relating to the event generated by the viewer window. The program window is used for aligning a plurality of events on the time axis to achieve correspondence between the window and a program listing.

US 2001/026561 A1 (MORRIS OCTAVIUS J ET AL) discloses a technique to store Characteristic Point Information, included in a transport stream (TS) and indicating, as a Potential Entry Point, a position at which stream mapping information exists separately from the stream.

US 6,473,102 B1 (FULLETRON GUYERIK B ET AL) discloses a technique to resize (scale up or scale down) and reposition (change the position of) a window on the GUI, in accordance with a configuration for rendering.

The recently cited references filed on March 24, 2006 by the Japanese Patent Examiner are as follows:

US Patent Application Publication No. US 2003/0142236 discloses a data broadening receiver apparatus that can adjust the display of an object, such as an item to be purchased on a shopping network using the TV display size. The object image can be sealed pursuant to an algorithm and can provide a "real" size presentation while maintaining image quality whether expanded or contracted.

The reference US Patent No. 5,907,659 (Yamauchi et al.) teaches processing frame data at one of a plurality of aspect ratios to coincide with a selected display method

None of the above references disclose a technique to store information that limits an area for rendering graphics in a recording medium to synchronize a moving picture and graphics. In other words, they fail to disclose a technique to store the window information according to the present invention in the recording medium.

As can be appreciated, the above references neither anticipate nor suggest the invention as set forth in Claim 17. It can be further appreciated that the remaining claims dependent from Claim 17, namely Claims 18-24, provide additional novelty features. The other independent Claims 25, 33, 34-36 also present the same novel features discussed above and they, and the relevant dependent claims therefrom, are also believed to be allowable.

Accordingly, it is respectfully submitted that applicant has qualified for accelerated examination of the present invention.

If there are any questions, the undersigned attorney can be reached at the phone number listed below.

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on July 10, 2006.

By: Sharon Farnus

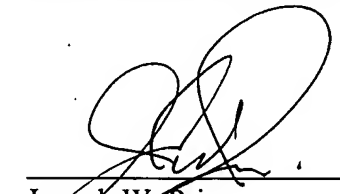
Sharon Farnus

Signature

Dated: July 10, 2006

Very truly yours,

SNELL & WILMER L.L.P.



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Docket No. 92478-7300

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:	Examiner: Not yet assigned
Joseph McCrossan, et al.	Group Art Unit: Not yet assigned
Serial No.: 10/554,627	COPY
Filed: October 26, 2005	
For: RECORDING MEDIUM, REPRODUCTION APPARATUS, RECORDING METHOD, REPRODUCING METHOD, PROGRAM, AND INTEGRATED CIRCUIT FOR RECORDING A VIDEO STREAM AND GRAPHICS WITH WINDOW INFORMATION OVER GRAPHICS DISPLAY	March 24, 2006

SUPPLEMENTAL
INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In an attempt to fully comply with the duty of disclosure set forth in 37 C.F.R. § 1.56 and in conformance with 37 C.F.R. §§ 1.97 and 1.98, applicants wish to bring to the attention of the U.S. Patent Office the following reference, which were found during the prosecution of a corresponding Japanese patent application::

Japanese Laid-open Patent Application No. 2002-209177 (U.S. Patent No. 5,907,659 is an English version in this patent family)

Japanese Laid-open Patent Application No. 2003-219372 (U.S. Publication No. 2003-142236 is an English version in this patent family)

A copy of this reference and form PTO-A820 are attached.

The undersigned attorney hereby certifies that each item contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart international application not more than three months prior to filing this statement.

If the Examiner believes that a telephone conference would help further the prosecution of this case, he is respectfully requested to contact the undersigned attorney at the listed telephone number.

Very truly yours,

SNELL & WILMER L.L.P.

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Costa Mesa, CA 92626-7689
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Fax: 714-427-7799

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on March 24, 2006, by Candy Neu

Signature

Date of Signature: March 24, 2006

PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	10554627
Filing Date	2005-10-26
First Named Inventor	Joseph McCrossan
Art Unit	TBA
Examiner Name	TBA
Attorney Docket Number	92478-7300

U.S.PATENTS

Examiner Initial*	Cite No	Patent Number	Kind Code[1]	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	5907659		1999-05-25	Yamauchi, et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

U.S.PATENT APPLICATION PUBLICATIONS

Examiner Initial*	Cite No	Publication Number	Kind Code[1]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20030142236		2003-07-31	Aratani, et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

FOREIGN PATENT DOCUMENTS

Examiner Initial*	Cite No	Foreign Document Number[3]	Country Code[2]	Kind Code[4]	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T[5]
	1	2002209177	JP		2002-07-26	Yamauchi, et al. (English version 5907659 above)		☐
	2	2003219372	JP		2003-07-31	Aratani, et al. (English version 2003142236 above)		☐

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Not for submission under 37 CFR 1.99)

Application Number	10554627
Filing Date	2005-10-26
First Named Inventor	Joseph McCrossan
Art Unit	TBA
Examiner Name	TBA
Attorney Docket Number	92478-7300

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T[5]
	1		☐

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

[1] See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. [2] Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). [3] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [4] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [5] Applicant is to place a check mark here if English language translation is attached.

PATENT COOPERATION TREA.

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
P32619-P0		
International application No.	International filing date *(day/month/year)*	(Earliest) Priority Date *(day/month/year)*
PCT/JP2004/006074	27/04/2004	28/04/2003
Applicant		
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

[X] It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

   a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

   [ ] The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

   b. [ ] With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. [ ] **Certain claims were found unsearchable** (See Box II).

3. [ ] **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

   [ ] the text is approved as submitted by the applicant.

   [X] the text has been established by this Authority to read as follows:

RECORDING MEDIUM, REPRODUCTION APPARATUS, RECORDING METHOD, REPRODUCING METHOD, PROGRAM, AND INTEGRATED CIRCUIT FOR RECORDING A VIDEO STREAM AND GRAPHICS WITH WINDOW INFORMATION OVER GRAPHICS DISPLAY

5. With regard to the **abstract**,

   [ ] the text is approved as submitted by the applicant.

   [X] the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

   a. the figure of the **drawings** to be published with the abstract is Figure No. 8A

      [X] as suggested by the applicant.

      [ ] as selected by this Authority, because the applicant failed to suggest a figure.

      [ ] as selected by this Authority, because this figure better characterizes the invention.

   b. [ ] none of the figures is to be published with the abstract.

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A recording medium storing an AVClip structured by multiplexing video stream and a graphics stream. The VIDEO graphics stream represents a moving picture made of a plurality of pictures, and the graphics stream includes graphics data representing graphics to be combined with the pictures. The graphics stream also includes window information (WDS) that specifies a window for rendering the graphics, and that indicates a width, a height and a position of the window on a plane which is a plane memory of a reproduction apparatus that combines the graphics with the pictures.

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G11B27/10 G11B27/034 G11B27/036 G11B27/038 G11B27/34
G11B20/10 G11B20/12 G11B20/14 H04N5/00 G06F3/033

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G11B H04N G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	"Digital Video Broadcasting (DVB); Subtitling systems; Final draft ETSI EN 300 743" ETSI STANDARDS, EUROPEAN TELECOMMUNICATIONS STANDARDS INSTITUTE, SOPHIA-ANTIPO, FR, vol. BC, no. V121, June 2002 (2002-06), XP014001876 ISSN: 0000-0001 cited in the application the whole document ----- -/--	1,3-7, 9-16

[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

° Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
30 September 2004	02/11/2004

Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Barel-Faucheux, C

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 1 145 218 A (BROADCOM CORP) 17 October 2001 (2001-10-17) page 2, line 5 - page 4, line 2 page 5, line 3 - page 6, line 7 page 7, line 29 - line 35 page 9, line 46 - page 12, line 35 page 13, line 52 - page 14, line 2 figures 1-3,6	1-16
A	US 6 275 852 B1 (ABRAHAMS LAWRENCE ET AL) 14 August 2001 (2001-08-14) column 3, line 41 - column 4, line 38 column 10, line 7 - line 37 column 10, line 66 - column 11, line 8 column 11, line 47 - column 12, line 53 column 13, line 11 - column 15, line 25 column 16, line 21 - column 17, line 37 column 18, line 18 - column 22, line 29 column 50, line 6 - line 27 column 50, line 42 - column 51, line 8 column 51, line 19 - line 67 column 52, line 52 - line 65 column 54, line 32 - line 55 column 59, line 27 - line 56 column 61, line 23 - line 34 column 62, line 40 - column 63, line 25 column 64, line 22 - line 36 figures 3A-5B	1-16
A	EP 0 920 014 A (SONY CORP) 2 June 1999 (1999-06-02) column 33, line 45 - column 34, line 5 figures 12-18,31A,31B,36A,36B	1-16
A	US 2001/026561 A1 (MORRIS OCTAVIUS J ET AL) 4 October 2001 (2001-10-04) the whole document	1-16
A	US 6 473 102 B1 (FULLERTON GUYERIK B ET AL) 29 October 2002 (2002-10-29) the whole document	1-16

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		AU 1910800 A	29-05-2000
		DE 69917489 D1	24-06-2004
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		US 5758072 A	26-05-1998
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		EP 0920014 A1	02-06-1999
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		WO 0176256 A1	11-10-2001
		EP 1275257 A1	15-01-2003
		JP 2003530037 T	07-10-2003
US 6473102 B1	29-10-2002	US 2002186253 A1	12-12-2002

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6473102 B1		US 2002191026 A1	19-12-2002

From the
INTERNATIONAL SEARCHING AUTHORITY

To:

see form PCT/ISA/220

PCT

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/JP2004/006074	27.04.2004	28.04.2003

International Patent Classification (IPC) or both national classification and IPC
G11B27/10, G11B27/034, G11B27/036, G11B27/038, G11B27/34, G11B20/10, G11B20/12, G11B20/14,

Applicant
MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:

European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized Officer

Barel-Faucheux, C

Telephone No. +49 89 2399-2516

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was field, unless otherwise indicated under this item.

   ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

   a. type of material:

   ☐ a sequence listing

   ☐ table(s) related to the sequence listing

   b. format of material:

   ☐ in written format

   ☐ in computer readable form

   c. time of filing/furnishing:

   ☐ contained in the international application as filed.

   ☐ filed together with the international application in computer readable form.

   ☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

Box No. II Priority

1. ☒ The following document has not been furnished:

   ☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).

   ☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

   Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:

Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	2 8
	No:	Claims	1 3-7 9-16
Inventive step (IS)	Yes:	Claims	2 8
	No:	Claims	
Industrial applicability (IA)	Yes:	Claims	1-16
	No:	Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document/s/:

D1: ETSI EN 300 743 V1.2.1 (06-2002); "Digital Video Broadcasting (DVB); Subtitling systems", XP14001876

D2: US2001/0026561 (4-10-2001), "Methods and apparatus for making and replaying digital video recordings and recordings made by such methods", PHILIPS.

D3: US-B-6 473 1021 (FULLERTON GUYERIK B ET AL) 29 October 2002 (2002-10-29)

D4: EP-A-0 920 014 (SONY CORP) 2 June 1999 (1999-06-02)

1. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1, 3-7 and 9-16 is not new in the sense of Article 33(2) PCT.

1.1. Document **D1** discloses a method of ~~recording onto a recording medium, said method comprising~~:

producing application data (MPEG2 Transport Stream or TS packets, see figure 3 on page 13, Section 5 on pages 13 to 15); and

~~recording the produced application data in the recording medium~~, and

the application data includes a digital stream constituted by multiplexing a video stream and a graphics stream;

the video stream represents a moving picture made of a plurality of pictures and the graphics stream includes:

graphics data representing graphics to be combined with the pictures;

(**D1** is an ETSI standard for Digital Video Broadcasting with subtitling with graphics object in subsection 5.4.5 or character objects in section 5.4.6 on pages 17, 18) and

window information that specifies a window for rendering the graphics therein, the window information indicating a width, a height and a position of the window on a plane, (Page Composition Segments PCS or Region Composition Segments RCS in subsections 5.1.3 or 5.1.4 on pages 14, 15, and the Overview on Section 4.1, pages 8, 9, and see also subsections 7.2.1 on pages 20, 21, Sections 7.2.2 on pages 21 to 23; and subsection 7.2.4 on pages 25 to 30) the plane being a plane memory (~~of a reproduction apparatus that combines graphics with the pictures~~.

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document/s/:

D1: ETSI EN 300 743 V1.2.1 (06-2002); "Digital Video Broadcasting (DVB); Subtitling systems", XP14001876

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window information that specifies a window for rendering the graphics therein, the window information indicating a width, a height and a position of the window on a plane, (Page Composition Segments PCS or Region Composition Segments RCS in subsections 5.1.3 or 5.1.4 on pages 14, 15, and the Overview on Section 4.1, pages 8, 9, and see also subsections 7.2.1 on pages 20, 21, Sections 7.2.2 on pages 21 to 23, and subsection 7.2.4 on pages 25 to 30) the plane being a plane memory (~~of a reproduction apparatus that combines graphics with the pictures~~.

It is known from prior art that MPEG2 TS packets can be recorded on a recording medium and reproduced therefrom using a MPEG2 decoder (see for example **D2**). So the struck-out above features are implicitly present in **D1**, where the MPEG2-TS packets can either be transmitted via a transmission channel or recorded on a recording medium.

Therefore claim 13 is not new.

1.2. Claim 1 defines a recording medium having the data produced by the method of claim 13 recorded thereon. Thus claim 1 is not new.

1.3. **D1** discloses also a method of ~~reproducing~~ decoding a digital stream constituted by multiplexing a video stream and a graphics stream, said method comprising:

decoding the video stream so as to obtain a moving picture made of a plurality of pictures (Digital Video); and

rendering graphics so as to be synchronously displayed with the pictures (see figure 3 on page 13 and Section 5.1 "Decoder Temporal Model" on pages 13, 14, with epochs as well as subsection 5.1.2 "Presentation Time Stamps" (PTS) on page 14), and:

the graphics stream includes window information that specifies a part of the plane as a window for rendering the graphics therein (see point 1.1); and

said rendering of the graphics includes a clearing of the graphics in the window in a plane memory used for combining the graphics with the picture, and a writing of the graphics to the window in the plane memory (Display memory, see Section 5.2 "Buffer memory model" on page 16, and see Table 3 on page 20, "acquisition point" and subsection 5.1.1 on page 14 "Service acquisition").

As digital video with subtitles (MPEG2-TS packets) are also recorded and reproduced in the prior art (see point 1.1 and **D2**), the reproducing is implicitly disclosed in **D1**.

Thus claim 15 is not new.

1.4. Point 1.3 above applies mutatis mutandis to independent reproduction apparatus claim 6, which comprises all the technical features of method claim 15 but in terms of device means.

Thus claim 6 is not new.

1.5. Point 1.3 above applies mutatis mutandis to independent integrated circuit claim 16, which comprises all the technical features of reproduction apparatus claim 6.

Thus claim 16 is not new.

1.6. Point 1.3 above applies mutatis mutandis to independent program claim 14, which comprises code to implement all the steps of method claim 15.

Thus claim 14 is not new.

1.7. The additional features of claim 7 with respect to claim 6 to which it refers is that:

a) the graphics stream includes **compressed graphics data**; and

said graphics decoder includes

a') a processor operable to decode the compressed graphics data,

b) and a controlling unit operable to perform the clearing operation and the writing operation.

D1 discloses :

feature a) and a') : see page 10, last line, "pixel data within objects are compressed using run-length coding", and on page 12, "an object data segment with a graphical object contains run-length encoded bitmap colours, while a text object carries a string of one character codes"; and

feature b) that is a graphics decoder including a controlling unit operable to perform the clearing operation and the writing operation (See subsection 5.1.1 "Service acquisition" on page 14 and Table 3 on page 20).

Thus claim 7 is not new.

1.8. The additional feature of claim 9 with respect to claim 7 to which it refers is that

c) said graphics decoder includes an object buffer operable to store decompressed graphics data decoded by said processor;

d) the graphics stream includes control information that contains crop information specifying a cropping frame within a graphics object obtained by decoding the graphics data in the object buffer;

e) said controlling unit is operable to crop a part of the graphics object within the cropping frame; and

f) the graphics to be synchronously displayed with the pictures is the part of the graphics object within the cropping frame.

Feature c) is also present in **D1** (Figure 3: "Pre-processor and filters" and "coded data

buffer"). The pre-processing in **D1** is the decompression of run-length data and the "coded data buffer" stores the MPEG2 encoded decompressed data.

On page 20, lines 20-22, of the description it is defined that "a cropping rectangle is a cropping frame that is used to specify and crop a part of the Graphics Object, and corresponds to Region in the ETSI 300 743 standard (**D1**)". This implies that features d) and f) are also present in **D1**.
Feature e) "said controlling unit is operable to crop a part of the graphics object within the cropping frame" is also implicitly disclosed in **D1**, see for example note page 21, where a LOGO may be distorted or cropped.

Thus claim 9 is not new.

1.9. The additional feature of claim 10 with respect to claim 9 to which it refers is also disclosed in **D1**:
the control information contains position information (subsection 7.2.2 on page 21 "Region composition segment" "region_width", "region_height", "object_horizontal position", "object_vertical_position") specifying a position in the window for rendering the part within the cropping frame; and
the part within the cropping frame is written to the window at the position specified by the position information.

So claim 10 is not new.

1.10. The additional feature of claim 3 with respect to claim 1, is that:
the graphics stream includes control information that contains crop information specifying a cropping frame within a graphics object obtained by decoding the graphics data; and
the graphics to be rendered in the window is a part of the graphics object within the cropping frame.
whereas the additional feature of claim 4 with respect to claim 3 to which it refers is that the control information contains position information specifying a position in the window for rendering the part of the graphics object within the cropping frame.

Following from points 1.8 and 1.9 above, these features are also not new, so claims 3 and 4 are not new.

1.11. The additional feature of claim 11 with respect to claim 10 to which it refers is that:

the graphics stream includes a plurality of pieces of control information;

the crop part and the position indicated by the crop information and the position information respectively in each piece of control information are different; and

said controlling unit is operable to realize one of scroll, wipe-in, wipe-out, cut-in, cut-out display effects by performing the clearing and writing of the graphics based on the crop information and the position information in each piece of control information.

is also disclosed in **D1** where page are refreshed, updated, new objects are displayed etc. This is also known from **D3** and editing effects is also known from **D4**.

So claim 11 is not new.

1.12. The additional feature of claim 5 with respect to claim 4 is that:

the graphics stream includes a plurality of pieces of control information for realizing one of scroll, wipe-in, wipe-out, cut-in, and cut-out display effects; and

each of the pieces of control information includes the crop information and the position information that respectively specify a different cropping frame and a position.

Following from point 1.11 above this is also not new, thus claim 5 is not new.

1.13. The additional feature of claim 12 with respect to claim 6 to which it refers is that the apparatus, further comprises two plane memories constituting a double buffer, wherein the graphics is displayed by switching the display graphics from contents stored in one of said plane memories in said double buffer to contents stored in the other one of said plane memories.
Double buffering is also disclosed in **D1** (See Annex A, Section A.6, on page 40).

2. The combination of the features of independent claim 1 with the feature of dependent claim 2 and the combination of the features of independent claim 7 with the feature of dependent claim 8 is neither known from, nor rendered obvious by, the available prior art.

Claim 2 defines indeed a recording medium according to claim 1, wherein the width and height of the window are set so that a size of the window is 1/x of the plane,
the plane corresponding to a size of each picture and
x being a real number based on a ratio between a window update rate and a picture

display rate.

Claim 8 defines a reproduction apparatus according to claim 7, wherein a size of the window is set so as to be 1/x of the plane,
x being a real number based on a ratio between a window update rate and a display rate of the video stream; and

the writing operation performed by said controlling unit is performed at a transfer rate based on the update rate of the window and the size of the window.

Notes : Claim 8 misses "the plane corresponding to a size of each picture" sentence.

On page 21 of **D1**, it is just mentioned that the "subtitle descriptor signals whether the associated subtitle data can be presented on any display or on displays of specific **aspect ratio** only", linking the size of a picture to a size of a window but *not to a window update rate or picture display rate.*

TRANSMITTAL LETTER (General - Patent Pending)	Docket No. 92478-7300

In Re Application Of: **Joseph McCrossan et al.**

Application No.	Filing Date	Examiner	Customer No.	Group Art Unit	Confirmation No.
10/554,627	October 26, 2005	Not yet assigned	52044		

Title: **RECORDING MEDIUM, REPRODUCTION APPARATUS, RECORDING METHOD, REPRODUCING METHOD, PROGRAM, AND INTEGRATED CIRCUIT FOR RECRODING A VIDEO STREAM AND GRAPHICS WITH WINDOW INFORMATION OVER GRAPHICS DISPLAY**

COMMISSIONER FOR PATENTS:

Transmitted herewith is:

Petition to Make Special
Copy of PCT International Search Report
Copy of IDS filed March 24, 2006
Preliminary Amendment

in the above identified application.

- ☐ No additional fee is required.
- ☐ A check in the amount of is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **19-2814** as described below.
  - ☒ Charge the amount of **$130.00**
  - ☒ Credit any overpayment.
  - ☒ Charge any additional fee required.
- ☐ Payment by credit card. Form PTO-2038 is attached.

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Dated: **July 10, 2006**

Signature

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cc:

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)] on July 10, 2006 (Date)

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